

**MOBILE AD HOC NETWORK (MANET) PROVIDING CONNECTIVITY
ENHANCEMENT FEATURES AND RELATED METHODS**

Abstract of the Disclosure

A mobile ad hoc network (MANET) may include a plurality of mobile nodes each including a wireless communications device and a controller connected thereto. At an upper protocol layer, the controller may establish a quality-of-service (QoS) threshold. At at least one intermediate protocol layer, the controller may select at least one route for transmitting data to at least one destination mobile node based upon the QoS threshold, and determine whether a QoS metric for the selected route falls below the threshold. At a lower protocol layer, the controller may cooperate with the wireless communications device to transmit data to the at least one destination mobile node via the at least one selected route, and cooperate with the wireless communications device at the lower protocol layer to adjust signal transmission power, pattern, and/or gain based upon a determination that the QoS metric has fallen below the QoS threshold.